

## CLAIMS

What is claimed is:

1. A die comprising:
  - a first plate having a first lip, a first location, and a second
  - 5 location where the first location is between the second location and the first lip;
  - a second plate having a second lip, a third location, and a fourth location where the third location is between the fourth location and the second lip the second location of the first plate being a distance away from
  - 10 the fourth location of the second plate; and
  - a shim having a top seat and a bottom seat;
  - the top seat of the shim contacting the first plate at the first location and the bottom seat of the shim contacting the second plate at the third location, so as to form a slot in the die which terminates at an orifice
  - 15 and is bounded at the orifice by the first and second lips, the first and second lips having a gap there between, the gap having a size;
  - a means for adjustably connecting the first plate to the second plate at the second location and the fourth location such that the size of the gap between the first and second lips is adjustable by adjusting the
  - 20 distance between the second location of the first plate and the fourth location of the second plate.
2. The die of Claim 1 wherein the first plate further comprises a helical spring positioned above the second location and the means for adjustably connecting the first plate to the second plate at the second
- 25 location and the fourth location comprises a coupling member having a head which is positioned above the helical spring and a fastener which protrudes from the head and extends through the helical spring and the first plate and at least partially through the second plate, so that the head is capable of compressing the helical spring when the head is moved
- 30 towards the first plate.
3. The die of Claim 2 in which the first plate has an outer surface located on a side of the first plate opposite to and above the second location, the spring being located on the outer surface of the first plate.
4. A method for controlling the gap size of a slot orifice gap of a
- 35 die, the die having
  - a first plate having a first lip, a first location, and a second location where the first location is between the second location and the first lip;

a second plate having a second lip, a third location, and a fourth location where the second location is between the fourth location and the third lip; and

a shim having a top seat and a bottom seat;

5           the shim contacting the first plate on the top seat at the first location and contacting the second plate on the bottom seat at the third location, so as to form a slot in the die which terminates at an orifice and is bounded at the orifice by the first and second lips, the first and second lips having a gap there between;

10           such that the size of the gap between the first and second lips is adjustable by a means of adjustment of a distance between the second location on the first plate and the fourth location on the second plate;

          comprising the step of adjusting the means of adjustment to decrease the distance and increase the size of the gap.

15           5. The method of Claim 4 in which the means of adjustment comprises a spring and a coupling member.